

PERFORMANCE WORK STATEMENT

SITE OPERATIONS SERVICES (SOS) FOR THE NATIONAL ENERGY TECHNOLOGY LABORATORY (NETL) (DE-RP26-03NT41818)

1.0 GOALS/BACKGROUND

Innovation - The contractor shall develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing the mission of the National Energy Technology Laboratory (NETL). Furthermore, the contractor shall use effective and efficient management structures, systems, and operations that are cost-effective while maintaining high levels of quality and safety in accomplishing the NETL mission. The contractor shall conduct all work in a manner that continuously improves productivity, minimizes waste, and complies with all applicable laws, regulations, terms, and conditions of the contract. This concept is further explained in the Performance Evaluation Plan (PEP).

Background - NETL is a Government-owned and Government-operated facility. The two principal NETL sites, located at 3610 Collins Ferry Road, P.O. Box 880, Morgantown, West Virginia, and at 626 Cochran's Mill Road, P.O. Box 10940, Pittsburgh (Bruceton, South Park Township), Pennsylvania, are 65 miles apart.

NETL is a Federal organization providing practical solutions to energy and environmental problems -- solutions garnered through innovative public/private partnerships and alliance formation. NETL performs, procures, and partners in technical research and development (R&D) to provide energy technology options that benefit the public. NETL was created in December 1996 through the consolidation of the former Morgantown Energy Technology Center and the former Pittsburgh Energy Technology Center. These predecessor organizations had been involved in fossil energy research for the past 50 years.

Goals - The Site Operations Services (SOS) Contract for the NETL has three goals.

1.1 Site Operations Division – Site Management Support

The first goal is to provide contractor site management support services, which enable the NETL Site Operations Division (SOD) to accomplish its mission at NETL facilities located in Morgantown, West Virginia, and Pittsburgh, Pennsylvania. The SOD mission is to provide, operate, and maintain state-of-the-art facilities to support and enhance accomplishment of DOE program goals. This includes providing cost-effective, reliable, energy efficient utilities and services, as well as facilities and equipment, to NETL in an environmentally acceptable manner.

1.2 Research and Development – Research Facility Support

The second goal is to provide R&D facility support services, which enable the R&D organization to accomplish its mission at NETL facilities located in Morgantown, West Virginia, and Pittsburgh, Pennsylvania. The mission of the research program is to conduct world-class research activities that make vital contributions in the production and use of fossil energy in an environmentally acceptable manner.

1.3 Environmental, Safety, and Health – Maintenance and Infrastructure Support

The third goal is to provide Environmental, Safety, & Health (ES&H) maintenance and infrastructure support services, which enable the ES&H division to accomplish its mission at NETL facilities located in Morgantown and Pittsburgh.

2.0 SCOPE

2.1 Types of Services

The activities in this statement of work (SOW) support on-site operations at NETL. The following types of services shall be required under this contract:

- a. Site Management Support
 - (1) Engineering and Technical Management and Consultation Services
 - (2) Lifecycle Asset Management and Consultation Services
 - (3) Property Management Services
- b. Research Facility Support
 - (1) Research Facility Engineering and Construction Support
 - (2) Research Facility Maintenance Support
 - (3) Fabrication and Assembly Support
 - (4) Research Facility Utilities and Services Support
 - (5) Quality Assurance and Quality Control Support
- c. ES&H Maintenance and Infrastructure Support
 - (1) Fire Protection Program Support
 - (2) Fire Alarm and Gas Alarm Network Support
 - (3) Emergency Notification System Support
 - (4) Miscellaneous ES&H Facility Maintenance

2.2 Resources

2.2.1 Contractor-Furnished Resources

The contractor shall provide all personnel, facilities, equipment, materials, and supplies necessary to accomplish the work under this contract, except those resources specifically identified in Section 2.2.2 of this SOW, which will be supplied by the Government.

2.2.2 Government-Furnished Resources

The Government will furnish only the resources identified in Appendix (?) of this contract, for accomplishment of the work under this contract. Government-furnished resources will be governed by Subsection (?) of this contract.

2.3 Location of Performance

The primary locations for the performance of work under this contract will be at NETL facilities located in Morgantown, West Virginia, and Pittsburgh, Pennsylvania. Contractor employees may be required to travel between the two NETL sites. Additionally, contractor employees may be required to travel off-site.

2.4 Hours of Operation

Official hours of operation for the NETL are from 8:00 a.m. to 4:30 p.m., Monday through Friday.

2.5 Core and Variable Work

2.5.1 Core Work

In this SOW, core work is defined as predictable, schedulable, and recurring work of a longer duration (typically one year or more) to be performed on-site using contractor resources. Most of the work outlined in this SOW is core work.

2.5.2 Variable Work

Variable work is defined as work that can be anticipated under the course of this contract; however, it will be variable in nature with respect to the amount of work, the timing of work, the duration of work, and the scope of work. Variable work may be on-site or off-site, using either on-site or off-site contractor resources. This work, although unanticipated and unscheduled at this time, may well be expected to occur due to the nature of the work performed in an on-site R&D organization.

3.0 APPLICABLE DOCUMENTS

The invoked or referenced documents that pertain to the work addressed in the service areas in this contract are identified in each of the individual service areas - Sections 4.1, 4.2, and 4.3 of this SOW.

4.0 SERVICE AREAS/PERFORMANCE REQUIREMENTS/NECESSARY CONDITIONS

Service Areas - The requirements in this SOW are grouped under Service Areas.

Performance Requirements - Performance requirements in this contract are expressed in the following manner. Each performance requirement will contain the following three elements. In each case, when taken together, these elements constitute a performance requirement.

- a. Performance Objective - A statement of the outcome or results expected in a specific service area. These objectives are identified in the basic contract for each service area.
- b. Performance Measures - The critical, few characteristics or aspects necessary to achieve the performance objective. The Government will monitor these measures. Each performance objective may have one or more performance measure. The performance measures may be stated in the basic contract or in the task orders issued to authorize work under this contract.
- c. Performance Expectations - The targeted level or range of levels of performance for each performance measure.

If performance requirements are applicable to all service areas, they are identified as General Performance Requirements.

Necessary Conditions – In some cases, other requirements supplement or support the accomplishment of Performance Requirements, in which case they are identified as Necessary Conditions. These conditions may or may not be accompanied by measures and expectations, but they must be satisfied in order for the Contractor to be eligible to receive any fee associated with the Performance Requirements. If the Necessary Conditions are applicable to all of the service areas, they are identified as General Necessary Conditions.

4.1 SERVICE AREA - SITE MANAGEMENT SUPPORT

The contractor shall implement, administer, and continuously improve crosscutting site management services for NETL. The support shall span both the Morgantown and Pittsburgh facilities, except where noted. Much of the work outlined is geared toward providing implementing requirements within existing DOE programs and processes necessary for regulatory and DOE Order compliance and consultation services. The work in this service area includes, but is not necessarily limited to, the following subservice areas:

- a. Engineering and Technical Management and Consultation Services
- b. Life Cycle Asset Management and Consultation Services
- c. Property Management Services
- d. Variable Work.

Necessary Condition No. 4.1

The work in this service area shall conform to the current version of NETL Orders 414.1, Quality Management System; 420.3, Conduct of Operations; 430.1, Life Cycle Asset Management; 430.2, Energy and Utilities Management; 450.1, Environmental Management System; NETL Procedure 430.4-2, Work Control System; and NETL Operating Plan 430.2-1, Energy Management Plan. NETL Orders, Procedures, and Operating Plans are on the NETL homepage, for the purpose of this solicitation only, at <http://www.netl.doe.gov/business/solicit/ssc2003/index.html>.

4.1.1 Subservice Area – Engineering and Technical Management and Consultation Services

4.1.1.1 Task Area – General Engineering, Design, Drafting, and Drawing Control Support

Performance Objective No. 4.1.1.1 - The contractor shall provide general engineering, design, drafting, and drawing control support as assigned by NETL. The support shall include, but is not necessarily limited to the following:

- a. Technical consultation.
- b. Assistance with engineering designs, construction inspections, and general drafting (maintaining drawings, records, and layouts of buildings and facilities).
- c. Additional support shall be provided for energy management improvements on-site, for identifying maintenance-worthy items for new buildings and systems, and for providing drawing reproductions.
- d. More specific site engineering support services, such as:
 - (1) Drafting services (layout, detail, assembly, and schematics) for several types of drafting, i.e., architectural, civil, electrical, geographical information system (GIS) instrumentation, mechanical, piping, process flow diagrams, structural, and utility, for construction and alterations of the facilities.

Necessary Condition No. 4.1.1.1.a

All drafting shall be performed in accordance with NETL Orders, Procedures, and Plans and electronically prepared utilizing AutoCAD computer-aided drafting (CAD) software. CAD-generated drawings created either on-site or off-site shall be stored electronically, utilizing the NETL Electronic Document Management System (EDMS). Drawings not generated with AutoCAD shall be field-verified and redrawn utilizing AutoCAD software. Drawing reproductions and reproducibles shall be provided as requested.

- (2) Technical consultation and assistance with engineering designs in the following areas:
 - SOW Preparation
 - Construction Cost Estimates
 - Design Reviews
 - Design Package Preparation

- Construction Closeout Activities
- Personnel Move Coordination (space planning and layouts)
- HVAC Layout and Analysis with Indoor Air Quality (IAQ) Considerations
- Engineering Surveys with an Electronic Distance Measurement (EDM) Total Station System
- Energy Management and Controls Support
- Systems Furniture Layout

Necessary Condition No. 4.1.1.1.b

Value engineering techniques and principles shall be employed to ensure that the best economical engineering solutions are achieved for all projects.

- (3) Quality control inspections when required or requested. The inspections, based on Inspection Plans, shall assist NETL in ensuring that the performance of construction activities are acceptable to DOE and meet all of the requirements specified on the drawings, in the SOW, and in applicable codes and standards.

Necessary Condition No. 4.1.1.1.c

All valid warranties for past construction projects shall be administered to protect NETL interests in previously installed systems and equipment.

- (4) Configuration management for buildings and facilities by maintaining drawings, records, construction files, and operation/maintenance manuals, as well as by reviewing and/or updating applicable standards, procedures, and quality control methods.
- (5) Record drawings to incorporate “as-built” information, as the data become available.
- (6) Condition Assessment Survey (CAS) Program by performing file information searches and assisting in the identification of maintenance-worthy items for new buildings and systems. The contractor shall learn to use CAS instruments (infrared camera or ultrasonic flow meter) and assist in taking readings and measurements, thereby identifying conditions that require maintenance (site caulking, weatherproofing, door replacements, window replacements, and roof replacements).
- (7) Support to energy management functions. The contractor shall assist in the identification of potential energy-saving projects, arrange for energy-improvement projects, and monitor and verify any implied energy savings.
- (8) General engineering design support. The contractor shall maintain the capability to respond to electrical engineering design support requests on a limited basis. Projects that are primarily electrical in nature shall be forwarded to the DOE electrical engineer point-of-contact for design.

4.1.1.2 Task Area -Variable Work

Performance Objective No. 4.1.1.2 - The contractor shall assist, when tasked, by providing the necessary personnel and expertise (either on-site or off-site) to conduct off-site energy audits, CAD services, energy management services, and engineering design and inspection services in support of NETL activities, cooperative agreements, and memoranda of understanding. These activities may include facility/building/equipment modifications and consultation services in energy management, space utilization, and site planning.

4.1.1.3 Task Area – Reporting Requirements

Performance Objective No. 4.1.1.3 - The contractor shall:

- a. Provide monthly design and construction activity reports and project status reports showing project title, brief description, work order numbers, completion date, and status.
- b. Track and report the following measures on a monthly basis.
 - (1) Procurement and Subcontracts Information -- the report shall display any projects for which procurement and subcontracting resources are committed, as well as final costs for all purchases and completed projects.
 - (2) Drafting Information -- the number of walk-up prints provided and the associated copy time required shall be logged to track the drafting time not reflected by work orders.
 - (3) The number of new and modified facility-related drawings produced.

4.1.2 Subservice Area – Life Cycle Asset Management and Consultation Services

The contractor shall provide support services for the general site management of NETL. The services to be provided are mainly associated with maintaining, repairing, operating, and servicing systems that are installed as part of the basic facility (non-research) and are essential to the normal functioning of the facility. Non-research operations generally begin at an interface defined as the first shut-off valve from the main feeder for gases and liquids or at the panel box or wall outlet for electrical service. Examples where this maintenance interface will apply are for systems such as nitrogen, instrument air, natural gas, cooling water, and electricity, for which general maintenance upstream of, and including, the first shut-off valve will be performed under this task, and downstream will be performed under Service Area 4.2.

4.1.2.1 Task Area - Maintenance Management Support

Performance Objective No. 4.1.2.1.a - The contractor shall assist in maintaining buildings and general-purpose (non-research) equipment by:

- a. Maintaining, repairing, and servicing general facilities, structures, equipment, utility systems, and surfaced areas. General facility equipment includes heating, ventilation, and air

- conditioning (HVAC), refrigeration, city water, fire protection, and natural gas distribution systems from the city or utility point of entry throughout the NETL facilities.
- b. Maintaining, repairing, and servicing the local power company's electrical distribution system, including electrical power transformers and stations, as well as disconnect switches, through secondary electrical sub-panels and motor control centers.
 - c. Maintaining, repairing, and servicing utility systems, which include heating and process steam generation and distribution, condensate return, process water, and compressed gases from supply source to the facility, up to and including the branch shut-off valve.
 - d. Performing road maintenance, including but is not necessarily limited to, snow removal from roads and parking areas.
 - e. Maintaining infrastructure and repairing sanitary sewers, storm sewers, and underground, contaminated wastewater removal distribution systems.
 - f. Maintaining painted surfaces associated with facility and research structures requiring surface preparation and specialized paint/painting techniques (both sites); the contractor shall perform painting and sealing of exterior/interior building surfaces at the Morgantown site.
 - g. Providing emergency support on a 24-hour per day basis if facility equipment failure impacts the NETL mission.
 - h. Maintaining and repairing security fence lines and gates.
 - i. Providing certified welding capabilities.

Necessary Condition No. 4.1.2.1.a - All work request tasks shall be processed through the NETL Central Work Control System.

Performance Objective No. 4.1.2.1.b - The contractor shall provide support by:

- a. Proposing and implementing updated resource management plans to meet the maintenance demands of the site.
- b. Providing trained technicians, processes for planning and scheduling of work activities, preventive maintenance procedures, equipment history and maintenance activity documentation, data analysis, root cause determinations, and response procedures to maintenance requests.
- c. Documenting and entering applicable maintenance data into the computerized maintenance management system. All maintenance-worthy items shall be identified, data plate information gathered, and preventive maintenance procedures developed.

4.1.2.2 Task Area – Life Cycle Asset Management Support

Performance Objective No. 4.1.2.2 - The contractor shall provide support by:

- a. Providing input, as required and requested, for the development and processing of the NETL Site Development Plan, the Annual Maintenance Budget, the Deferred Maintenance Reporting Requirements, and the Maintenance Crosscut Budget. The information contained in the database of the computerized maintenance management system shall be current, reports shall be generated, and the data shall be analyzed in support of this effort.
- b. Updating, as required by procedure or request, the Condition Assessment Survey (CAS) program at NETL. The information contained in the database of the computerized condition assessment information system (CAIS) shall be kept up to date through the downloading of inspection information from the individual surveys and the data analyzed as required to assist in this effort.
- c. Performing inspection assessments, as required by procedure or request, and uploading all CAS data into the facility information management system (FIMS) and CAIS databases, as appropriate.
- d. Utilizing diagnostic equipment provided by NETL such as the vibration analyzer, Dranetz power quality analyzer, infrared camera, and ultrasonic devices to evaluate existing equipment to predict corrective maintenance initiatives prior to equipment failure.

Necessary Condition No. 4.1.2.2 – The support services provided in this area shall be consistent with requirements of NETL Order 430.1.

4.1.2.3 Task Area - Services Management Support

Performance Objective No. 4.1.2.3 - The contractor shall maintain non-research delivery systems including preventive, corrective, and predictive activities as required by procedure and approved industry standards and practices. The contractor shall provide assistance support by:

- a. Operating, maintaining, and repairing all utility service systems including ancillary components.
- b. Providing general site management support through the operation of the service systems including steam, condensate return, nitrogen, compressed air, heating and process steam generation, process-cooling water, bulk liquid nitrogen, and wastewater treatment plants.
- c. Operating, maintaining, and repairing boilers, the cooling tower, chillers and pumps, air and inert gas compressors, wastewater treatment plants, and ancillary components for

these systems.

- d. Providing steam, compressed air and gases, and process cooling water as required meeting the NETL mission.
- e. Operating and maintaining compressed gas cylinder storage area and services.

4.1.2.4 Task Area - Modification Management Support

Performance Objective No. 4.1.2.4.a - The contractor shall provide modification management assistance support for buildings, general purpose equipment, utility systems, and surfaced areas by altering and modifying facilities, equipment, utility systems, and surfaced areas based on approved plans and drawings. This also includes repair by replacement.

Performance Objective No. 4.1.2.4.b – Variable Work – The contractor shall provide sub-contractual support if contractor core resources are not sufficient to maintain a manageable work backlog or to meet critical priority work schedules.

4.1.2.5 Task Area - Central Work Control System Management Support

Performance Objective No. 4.1.2.5 - The contractor shall provide assistance support by:

- a. Operating a central work control system according to NETL procedures and approved industry standards. The central work control system shall be operated through an existing computerized maintenance management system.
- b. Planning and scheduling activities to determine resource and material requirements and to ensure their availability prior to scheduling the requested work.
- c. Tracking each work request from authorization, planning, and scheduling through completion and/or cancellation.

4.1.2.6 Task Area - Motor Pool Management Support

Performance Objective No. 4.1.2.6 - The contractor shall provide support by:

- a. Operating the motor pool.
- b. Providing preventive and corrective maintenance activities on station vehicles and station equipment, including, but not necessarily limited to, cars, pick-up and heavy-duty trucks, material-handling equipment, tractors, tow motors, loaders, electric carts, and miscellaneous portable items such as pumps, welders, generators, compressors, snow-removal blades, and salt spreaders. Grounds maintenance equipment is covered in a separate contract. The necessary documentation and record keeping shall be

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maintained and submitted to NETL as required by procedure and request.

4.1.2.7 Task Area - Shuttle Service and Transport Support

Performance Objective No. 4.1.2.7.a - The contractor shall provide driver shuttle/messenger service support between the NETL Morgantown and Pittsburgh sites, Monday through Thursday, on a preset schedule or as directed by the COR. The contractor is authorized to use Government vehicles for this service. Services shall include, but are not necessarily limited to, the following:

- a. Transporting office personnel and visitors between the sites.
- b. Delivering messages, documents, packages, and correspondence to various business concerns or Government agencies.
- c. Obtaining receipts for articles delivered and keeping a log of items received or delivered.
- d. Performing miscellaneous errands, such as carrying samples and packages.

Performance Objective No. 4.1.2.7.b - Upon special authorization, the contractor shall provide local delivery and transportation services. The contractor is authorized to use Government vehicles for this service.

4.1.2.8 Task Area - Facility Safety Analysis Review System (SARS) Consultation Support

Performance Objective No. 4.1.2.8 - The contractor shall provide support by:

- a. Assisting in the preparation of SARS packages, as assigned by DOE, to obtain operating permits for new or modified facilities.
- b. Assisting SOD in follow-up actions associated with Facility SARS recommendations and conditions.
- c. Maintaining and cataloging SARS information.

4.1.2.9 Task Area - Quality Assurance (QA)/Quality Control (QC) Support

Performance Objective No. 4.1.2.9.a - The contractor shall support SOD by:

- a. Providing support in the areas of QA procedure and program development and revision.
- b. Providing miscellaneous support such as conducting QA reviews, conducting code interpretations, assessing welding quality, and performing supplier audits.

4.1.2.10 Task Area – Reporting Requirements - The contractor shall support SOD by:

- a. Providing general monthly activity reports on maintenance performed on NETL-owned

or -leased equipment.

- b. Obtaining and tracking the following on a semi-annual basis.
 - (1) Time Performance Data - percentage comparisons for closed work orders based on estimated hours to actual hours in three categories - less than, equal to, and greater than - by total for facility and project-related work.
 - (2) Date Completed Performance Data - percentage comparisons for closed work orders based on planned completion date to actual completion date in three categories - less than, equal to, and greater than - by total for facility and project-related work.
 - (3) Total Maintenance Cost per Building Data - the total labor and material maintenance cost for each building.

4.1.3 Subservice Area - Property Management Services

The contractor shall provide property management support services for NETL in accordance with appropriate regulations, supplemented by internally developed procedures. The scope of this support includes the following annual activities.

- a. Inventorying approximately 2,000 to 20,000 line items of personal property annually.
- b. Tagging and accounting for approximately 3,200 new line items of personal property annually.
- c. Assisting in the review of approximately 50 contractor system reviews.
- d. Assisting with the disposition of property and closeout of approximately 200 DOE awards annually.
- e. Processing approximately 1,800 award actions into the Property Administration and Management System (PAMS).

4.1.3.1 Task Area - Property Management Support

Performance Objective No. 4.1.3.1 - The contractor shall provide efficient control and utilization of Government-owned property consistent with Federal, DOE, and organizational directives, e.g., Federal Property Management Regulations (FPMR), Federal Management Regulations (FMR), DOE PMR, and NETL Order 580.1, Personal Property Management, to control, protect, preserve, and maintain Government property. The contractor shall support this function by:

- a. Operating and maintaining an automated, accountable property management system using bar-code technology. Tagging property in accordance with the NETL Property Management Guide and assigning property, as applicable.
- b. Establishing and maintaining relationships with NETL organizational entities with

personal property management responsibilities to ensure that priorities are met within the organization.

- c. Conducting physical inventories of Government property as required by DOE PMR 109-1.5110. Inventory-by-exception techniques shall be used to inventory sensitive property with the approval of the NETL Organizational Property Management Officer (OPMO). Precious metals, as defined in DOE PMR 109-27.5104-4, shall be inventoried on an annual basis. Reports of all inventory results shall be reported to the OPMO.
- d. Maintaining data in the Energy Asset Disposal System (EADS).
- e. Providing support for pre-award, award, administration, and closeout of all DOE used, energy-related-laboratory-equipment grants.
- f. Maintaining local excess and equipment-held-for-future projects (EHFFP) databases.
- g. Providing for the storage of equipment not required. This equipment shall be tagged and stored as excess.
- h. Managing and controlling access to the NETL scrap facility (only non-contaminated scrap metal shall be accumulated in the scrap holding facility), including ensuring that property retirement and disposal procedures are followed and that scrap is removed according to schedule. Disposal of property shall be in accordance with applicable rules and regulations.
- i. Preparing property management reports as required by DOE PMR 109-1.5148. In addition, the contractor shall prepare monthly NETL plant and capital equipment reports on all acquisitions, reutilizations, dispositions, and inventory results reports.
- j. Providing support in the areas of safeguarding, such as access, storage, and accountability of all EHFFP, critical spares, excess property, and furniture. The contractor shall maintain a check-in/out system maintained through the shipping/receiving area for access to the property area (EHFFP, excess, sales, furniture, etc.). The contractor shall review any equipment required for future NETL programs for retention and shall categorize and store equipment as EHFFP, spares, or equipment pool.
- k. Providing furniture management, tool crib items, and furniture key control support.

4.1.3.2 Task Area - Off-Site Property Management Support

Performance Objective No. 4.1.3.2 - The contractor shall provide support for the administration of property in the possession of off-site NETL contractors by:

- a. Obtaining and processing reports from awardees for input into the off-site property database.
- b. Coordinating the complete disposition of excess property submitted from off-site

Government contractors.

- c. Assisting DOE property management specialists in reviewing and appraising contractors' property management systems to assess application of written policies and adoption of processes that promote the efficient and effective use of Government property.
- d. Coordinating the submission and review of contractor's final inventory of property.
- e. Maintaining records of off-site contractor property files and preparing memoranda and letters, as appropriate.
- f. Providing financial and property code input into NETL financial accounting systems.
- g. Providing timely and accurate submission of required reports, as well as preparation of requests for loan, borrow, transfer or retirement of property.

4.1.3.3 Task Area - Materials Management Support

Performance Objective No. 4.1.3.3 - The contractor shall manage storeroom items (item issuance, inventory control, and maintenance of stocked items) in the most practical and economical manner consistent with NETL program needs and applicable laws and regulations. The NETL storeroom is located in Building 19 at the Morgantown site. Storeroom operating hours shall be from 7:00 a.m. to 4:00 p.m., Monday through Friday, excluding Government holidays. The contractor shall manage the warehouse, which includes storage and control of all bulk stores and critical spares. The contractor shall provide support by:

- a. Processing material issue requests through personal pickup, site mail, LAN, or voice mail.
- b. Maintaining and distributing an annual storeroom stock catalog and an office supply stock catalog.
- c. Tracking all stock transactions through a computerized inventory control system.
- d. Conducting physical inventories of all storeroom items in accordance with NETL, DOE, and Federal regulations to ensure record accuracy. Providing results of inventory to the OPMO for review and approval of inventory adjustments.
- e. Returning non-contaminated "used equipment/material" to stock for re-issue or placement is EHFFP. The contractor shall review any equipment required for future NETL programs for retention and store equipment as EHFFP, spares, or in the equipment pool.
- f. Controlling access to the storeroom/warehouse (which is a secure building utilized as an enclosed storage area for a variety of items, including low-frequency-use articles, storeroom stock, and EHFFP).
- g. Providing delivery service to/from the warehouse to meet customer demands.

4.1.3.4 Task Area - Material Transportation Management Support

Performance Objective No. 4.1.3.4.a - The contractor shall provide necessary transportation and traffic management support for incoming materials. Incoming materials shall be received at the centralized receiving facility at the Morgantown site. The scope of this support includes receiving approximately 30,000 packages, shipping approximately 2,000 packages, and conducting approximately 400 quality inspections each year.

Performance Objective No. 4.1.3.4.b - The contractor shall provide additional support by:

- a. Completing claims on incoming shipments for problem orders.
- b. Notifying the requisitioner of the receipt of material and coordinating pickup and acceptance of materials.
- c. Maintaining a complete audit trail to minimize/discourage waste, fraud, and abuse.
- d. Providing delivery of storeroom stock, procured items, and other stored materials to the Morgantown and Pittsburgh facilities.
- e. Inspecting material for physical damage and purchase order requirements, as well as ES&H and quality control requirements (technical inspections of material specifications shall remain the responsibility of the requestor).
- f. Initiating nonconformance reports for damaged or suspect/counterfeit items.
- g. Checking and accounting for all required documentation, including Certified Material Test Reports (CMTR) and Certificates of Compliance (C of C) for Quality Class 2 and 3 items.
- h. Completing and filing Receipt Inspection Reports for QA Class 2 and 3 items.
- i. Reviewing all freight invoices prior to payment.
- j. Filing freight claims for over billing or carrier negligence.
- k. Coordinating outgoing shipments. The contractor shall ensure that shipments of hazardous materials are made in accordance with regulatory requirements regarding proper marking and packaging.
- l. Selecting transport mode and carrier based on the ability to perform transportation services in a satisfactory and economical manner by taking full advantage of Federal- and DOE-wide transportation contracts and tenders. The contractor shall ensure compliance with DOE-PMR 109-40 and DOE Order 460.2.
- m. Entering applicable data into the DOE Shipment Mobility Accountability System (SMAC).

4.1.3.5 Task Area - Mail, Express and Small Package Processing/Delivery Services

Performance Objective No. 4.1.3.5.a - The contractor shall provide mail, express, and small package processing/delivery support services, including operating an office at which NETL employees can receive postal services. Supplies specific to the express and small package processing/delivery service

shall be provided for that service via the NETL.

The contractor shall perform the following services with respect to express and small package items for dispatch/delivery.

- a. Provide the necessary labor to support the Express and Small Package Processing/Delivery Service operations at NETL.
- b. Process/deliver express letters and packages and Small Package Processing/Delivery Service daily in Pittsburgh only.
- c. Complete the automated entry of addresses, which will generate appropriate labels and enter the article into the Express and/or Small Package Delivery Service's tracking system.
- d. Assemble packages in appropriate shipping containers and affix proper labels; verifying express account numbers with list before processing item.
- e. Transfer packages to the Small Package Delivery Service's courier on an as- required basis (usually p.m. pick-up); transfer express items to the express dispatcher at the 2:00 p.m. pick-up; deliver daily express items to recipients in the a.m. (Delivery is performed by another Site Support Contractor in Morgantown.
- f. Forward invoices generated through the daily closeout process to NETL Accounts Payable for small packages; forward daily NETL-Express Authorization & Account Forms to the assigned account Monitor from processed items; file daily express report.
- g. Respond to NETL inquiries pertaining to the tracking and verification of items sent.
- h. Prepare a daily closeout via the computerized system, which shall consist of the creation an invoice for payment to the Small Package Delivery Service; prepare a shipper's verification report, and prepare a daily express report.
- i. X-ray all mail and all packages received through ground transportation and courier companies for possible explosives devices and/or firearms or organic contaminants using the DOE-owned x-ray machines, screen for suspect mail/packages in accordance with NETL suspect mail/packages handling protocol, and wear protective garments provided.

Performance Objective No. 4.1.3.5.b - Upon request, the contractor shall arrange for and provide after-hours, e.g., after 7:00 PM, pick-up service for express delivery packages received as well as transport service to express package receipt centers.

Performance Objective No. 4.1.3.5.c - The contractor shall prepare and submit the following deliverables.

- a. Monthly Activity Report
- b. Physical Inventory Report of Equipment and Capital (Biennially)

- c. Property Utilization Report (Annually)
- d. Contractor Property Report (Annually)
- e. Excess Personal Property Furnished to Non-Federal Recipients (Annually)
- f. Plant & Capital Equipment Report (Monthly)
- g. Precious Metals Report (Annually)
- h. Physical Inventory Report of Sensitive Storeroom Stock Turnover (Annually)
- i. Transportation Activities Report (Annually).
- j. The contractor shall maintain a log of all Package Express Delivery mail. The contractor shall provide Package Express Delivery mail usage information, monthly reports and other information required by the COR.
- k. Negotiated Sales Report (Annually).

Performance Measures

- a) Quality
- b) Timeliness
- c) Cost Control

Performance Expectations

100% in accordance with quality requirements outlined in the PEP.

100% in accordance with schedule requirements outlined in the PEP.

100% in accordance with cost requirements outlined in the PEP.

4.2 SERVICE AREA – RESEARCH FACILITY SUPPORT

The purpose of this task is to provide facility-related support and services to the NETL on-site R&D organization located at the Morgantown and Pittsburgh sites. It is the contractor's responsibility to develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing this mission. The contractor shall provide research facilities (See definition in Section 6.0 of this SOW) support and services in the following core areas.

- a. Research Facility Engineering and Construction Support
- b. Research Facility Maintenance Support
- c. Fabrication and Assembly Support
- d. Research Facility Utilities and Services Support.
- e. Quality Assurance and Quality Control Support

Necessary Condition No. 4.2 – The contractor shall ensure that the work in this service area conforms with the latest version of NETL Orders 414.1, Quality Management System; 420.3, Conduct of Operations; 421.1-1, R&D Safety Analysis and Review System; 430.1, Life Cycle Asset Management; 430.2, Energy and Utilities Management; 450.1, Environmental Management System; NETL Procedure 430.4-2A, Work Control System; and NETL Operating Plan 430.2-1, Energy

Management Plan. NETL Orders, Procedures and Operating Plans are on the NETL homepage at <http://www.netl.doe.gov/business/solicit/ssc2003/index.html>.

4.2.1 Subservice Area – Research Facility Engineering and Construction Support

Performance Objective No. 4.2.1 - The contractor shall provide engineering and construction support as assigned by the DOE on-site R&D organization. All work performed as part of this task shall be carried out and completed in accordance with applicable NETL orders, plans, and procedures. The contractor shall provide services, such as:

- a. Acquisition and installation of equipment, services, supplies, and materials associated with research and development facilities.
- b. Drafting support related to architectural, civil, electrical, instrumentation (P&ID), mechanical, piping and process flow diagrams (PFD), and structural for construction of and alterations to research facilities. All drafting shall be performed in accordance with NETL procedures and electronically prepared utilizing AutoCAD. CAD-generated drawings, on-site and off-site, shall be stored electronically, utilizing the NETL Electronic Document Management System (EDMS).
- c. Engineering CAD System Support.
- d. Technical consultation and assistance in the areas of engineering planning, design, cost estimating, development of design packages for DOE review, and construction management.
- e. Quality control for all activities conducted in support of the NETL on-site R&D organization in accordance with NETL Order 414.1, Quality Management System, including material control, in-process testing, development of quality assurance packages, and construction inspections for on-site R&D facility-related projects to ensure that the construction activities are acceptable to DOE and meet all of the requirements communicated on drawings and statements of work, as well as through applicable codes and standards.
- f. Drawing revision to incorporate “as-built” information, as new data become available. Revisions to approved designs through DOE-approved Engineering Change Notices or Change Sheets.
- g. General engineering design support, as required by the DOE in-house R&D organization. However, major engineering design efforts will be conducted through the research and development contract. Then, in most cases, the design package will be turned over to the site operations contractor for construction. In either case, the contractor will be expected to work with the research and development contractor, as well as other site support contractors, when responsibilities overlap. DOE will make the final determination in all cases. See the definitions for large-scale and small-scale

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projects at the end of this SOW.

4.2.2 Subservice Area - Research Facility Maintenance Support

Performance Objective No. 4.2.2 - The contractor shall provide general maintenance support to research facilities as assigned by the on-site R&D organization. This support can be described as maintenance, repair, and servicing of systems that are installed as part of the research facility and are essential to the normal function of the research facility. The contractor shall provide maintenance support to (research) facilities located on the Morgantown and Pittsburgh sites as follows.

- a. Maintain equipment, utilities, services, supplies, and materials associated with research and development facilities. Perform minor repairs and adjustments to equipment specific to the research operation.
- b. Provide maintenance training related to research-facility equipment necessary to accomplish effective and efficient operations while ensuring a safe and healthful workplace environment.
- c. Perform facility inspections before, during, and after scheduled research and development operations.
- d. Support start-up, shakedown, testing, shutdown, and decommissioning activities related to research facilities.
- e. Decommission, demolish, decontaminate, and provide services, e.g., crating and packaging, to excess Government property.
- f. Maintain laboratory/exhaust hood areas and project ventilation.
- g. Utilize the NETL work control system to track research facility work.
- h. Provide emergency support on a 24-hour per day basis should project equipment failure impact on-site R&D mission.
- i. Provide certified welding capabilities.

4.2.3 Subservice Area - Fabrication and Assembly Support

Performance Objective No. 4.2.3 - The contractor shall construct small- and large-scale prototype experimental units for use in research and development operations, as requested by the on-site R&D organization. Fabrication and assembly activities are as follows.

- a. Fabricate, assemble, install, modify, and provide alteration services associated with research and development equipment in accordance with NETL Order 414.1, Quality Management System, and other applicable codes and standards.
- b. Maintain and operate machine shop for fabrication and assembly of parts and equipment required in the on-site R&D program following established NETL standards and procedures.
- c. Manage facility support through the NETL work control system by developing and maintaining a database for the completion of research-related fabrication, assembly and installation activities in accordance with NETL schedules and priorities.

4.2.4 Subservice Area - Research Facility Utilities and Services Support

Performance Objective No. 4.2.4 - The contractor shall support on-site R&D facility equipment and operations before, during, and after operating periods. Research facility utilities and services activities are as follows.

- a. Maintain good housekeeping practices around research and development operations. Store or dispose of excess items. Dispose of debris/waste in an environmentally acceptable manner. Work areas shall be cleaned up immediately following work or at the end of each day.
- b. Periodically check lines, e.g., electrical, nitrogen, and air, from the location where the responsibility of the research operations contractor begins. Deficiencies shall be remedied.
- c. Provide work order system services to the on-site R&D organization as part of the NETL Work Order Control System.
- d. Provide utilities and services (compressed air, condensate return, natural gas, nitrogen, process water, and steam) to the research projects as identified in utilities scheduling meetings.

4.2.5 Subservice Area - Quality Assurance and Quality Control Support

Performance Objective No. 4.2.5 – The contractor shall provide QA/QC assurance oversight for all services and support provided in this contract. In order to act in the oversight role, those persons associated with this activity shall have sufficient authority and freedom from the line to carry out the required responsibilities. QA/QC functions are as follows:

- a. Support the contract management personnel in the development of a quality management system that is consistent with the NETL quality management system and the requirements of DOE Order 414.1, Quality Management System.
- b. Organize, execute, and maintain a quality management system that is consistent with NETL Order 414.1, Quality Management System.
- c. Assist NETL in developing and maintaining plans, procedures, guidelines and manuals associated with the NETL quality management system.
- d. Ensure that craftsmen are certified and that procedures are commensurate with the work requirements of this contract.
- e. Ensure that contract employees engaged in activities at NETL receive appropriate training and certification to perform their job functions in accordance with NETL and DOE quality assurance requirements.
- f. Ensure that training records for contract employees engaged in activities at NETL are properly maintained and up to date.
- g. Assist NETL in assembling, executing and maintaining quality assurance documents and records that relate to R&D design, construction, maintenance and demolition.
- h. Perform self-assessments on a periodic basis to ensure that the requirements of the NETL and the SOS contract quality management systems are being met.

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- i. Perform self-assessments on a periodic basis to ensure that the requirements of the NETL Conduct of Operations program are being met.

4.2.6 Subservice Area - Variable Support

Performance Objective No. 4.2.6 - The contractor shall provide short-term, unscheduled work that supports the research mission at NETL.

4.2.7 Subservice Area – Reporting Requirements

Performance Objective No. 4.2.7 - The contractor shall:

- a. Provide monthly activity reports and monthly project status reports (showing project title, brief description, work order numbers, completion date, and status).
- b. Track and report the following measures on a monthly basis.
 - (1) Procurement and Subcontracts Information -- the report shall display any projects for which procurement and subcontracting resources are committed and final cost of all purchases and completed projects
 - (2) Drafting Information -- the number of walk-up prints run and the associated copy time required shall be logged to track the drafting time not reflected by work orders. The number of new and modified (research) facilities-related drawings produced shall also be tracked.

Performance Measures

- Quality
- Timeliness
- Cost Control

Performance Expectations

100% in accordance with quality requirements outlined in the PEP.
100% in accordance with schedule requirements outlined in the PEP.
100% in accordance with cost requirements outlined in the PEP.

4.3 SERVICE AREA - ES&H MAINTENANCE AND INFRASTRUCTURE SUPPORT

The purpose of this task is to administer and support crosscutting risk management support for NETL. The support shall span the Morgantown and Pittsburgh facilities, except where noted. The major work in this task includes the known and established work of maintenance to ES&H-related infrastructure and systems, including:

- a. Fire Protection Systems
- b. The Emergency Notification System (ENS)
- c. Gas Sensors
- d. Fire Alarms and ENS in their integrated networks, as well as individual sensors
- e. Miscellaneous devices such as ladders, hoists, rigs, etc as described in the individual subtasks below. The contractor is responsible for design and engineering support for new installations and expansions from the existing systems as well as the installations of

new components, including finishing work, such as painting or corrosion protection, as needed.

Necessary Condition No. 4.3

The work in this service area shall conform to the current version of NETL Orders 440.1-4, Fire Detection Devices and Alarm Systems; 440.1-5, Fire Extinguishing Systems, Including Fixed Systems and Portable Fire Extinguishers; 440.1-9, Assessment, Inspection, Testing, and Maintenance of Fire Protection Systems, Equipment, and Programs; 440.1-10, Fire Protection Cold Weather Protection Program; NETL Procedure 440.1-12A, Worker Protection Program Implementation; and NETL Operating Plan 440.1-4, General Workplace Safety Program.

4.3.1 Subservice Area - Fire Protection Program Support

The contractor shall maintain the equipment and systems employed by the fire protection program. The contractor shall provide engineering support for the analysis and design functions.

4.3.1.1 Task Area - Maintain Fire Suppression and Alarm Systems

Performance Objective No. 4.3.1.1 - The contractor shall provide fire suppression systems maintenance to ensure that the system is operable and capable of protecting employees and property. This includes, but is not necessarily limited to, required standpipe and sprinkler head flow testing; paint on all fire suppression equipment (standpipes, water supply lines, horns, bells, hydrants, post indicator valves, any and all other building exterior apparatus related to fire alarm or suppression systems) maintained in a condition of adequate paint protection and corrosion prevention that does not use lead paint; and replacement of broken, deteriorated, or otherwise inoperable parts. The contractor is responsible for the initial painting of fire suppression components that require it.

4.3.1.2 Task Area - Maintain Facility Fire Protection Equipment and Systems

Performance Objective No. 4.3.1.2 - The contractor shall maintain fire protection systems and equipment and perform minor facility fire protection remediation in accordance with approved drawings.

4.3.1.3 Task Area – Maintain Fire Extinguishers

Performance Objective No. 4.3.1.3 – The contractor shall:

- a. Place and sustain a supply of fully functional and charged fire extinguishers, including mounting brackets and hooks.
- b. Ensure compliance with the regulatory or NFPA requirement for professional breakdown, inspection and maintenance of extinguishers each six years.
- c. Inspect, test and maintain all fire extinguishers on a regular basis.

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4.3.1.4 Task Area – Maintain Fire Protection Equipment, including Fire Doors

Performance Objective No. 4.3.1.4 - The contractor shall maintain NETL doors including corrosion prevention and repair or replacement of parts. This includes the maintenance of door knob, hinge, closer, and latching mechanisms, as well as the required performance of fire doors to close and latch on their own which may require frequent adjustments between heating and air conditioning seasons.

4.3.1.5 Task Area – Maintain Fire Alarm and Gas Alarm Network Support (known as the MSA-DAN System and the Johnson Control System)

Note: The Contractor should note that both the MSA-DAN and Johnson Control networks are used but the gas monitors are from various manufacturers.

The contractor is responsible for the system regardless of the manufacturer.

Performance Objective No. 4.3.1.5 - The contractor shall:

- a. Provide engineering and technical services to design, develop system specifications, install, calibrate, support and maintain the NETL fire- and gas-alarm- notification systems for the facilities including both scheduled and incidental service.
- b. Provide verification, acceptance, and functional testing of the alarm systems and equipment.
- c. Maintain and update instrumentation maintenance inventory. The fixed gas alarm and monitoring system includes the integrated alarm network and its several remote output stations. However, it does not include portions of the network covered by Silent Knight (the fire panel used on the Morgantown site) or Simplex (the fire panel used on the Pittsburgh site).
- d. Make final connections of new sensors and replacing old ones.
- e. Decommission unnecessary monitors and other equipment in the NETL gas and fire alarm system, and re-commission them if a return to service is required. For instance, take gas monitors off line and cease calibration and sensor replacement when a project has been inactive six or more months, and no activity is planned. This will require contact with Responsible Persons to assure gases have been eliminated from the area and to assure re-commissioning will occur upon notification of planned activity.

4.3.2 Subservice Area - Emergency Notification System Support

Performance Objective No. 4.3.2 - The contractor shall provide management and technical support for the Emergency Notification System (ENS). The ENS is a supervised paging system requiring high reliability and high availability. The contractor shall provide management services to ensure that requests for new services, service changes, system maintenance, and service disconnects are addressed within established NETL guidelines. The contractor shall provide technical support to maintain, upgrade, diagnose performance issues, and repair the ENS system, including system electronics, system cabling and system enunciators, e.g., speakers and strobes. The contractor should note that the ENS systems are installed differently at the two sites. The ENS in Pittsburgh is an integral part of the fire alarm system, while the system in Morgantown is installed independently.

4.3.3 Subservice Area - Miscellaneous ES&H-related Maintenance

Performance Objective No. 4.3.3 - The contractor shall provide maintenance to ES&H-related systems and equipment that are part of scheduled inspection programs, including but not limited to elevators, cranes, portable hoists, ladders, eyewash stations, and emergency showers.

4.3.4 Subservice Area - Variable Work

Performance Objective No. 4.3.4 - The contractor is responsible for short-term, unscheduled work that supports maintenance to ES&H-related infrastructure and systems and for design and engineering support for new installations and expansions from the existing systems as well as the installations of new components, including finishing work. The work shall fall under the scope of fire-protection and gas-alarm-notification systems components and networks, fire protection equipment and systems, the Emergency Notification System, and miscellaneous ES&H-related equipment that are included in ES&H regularly scheduled inspections.

Performance Measures

- Quality
- Timeliness
- Cost Control

Performance Expectations

100% in accordance with quality requirements outlined in the PEP.
100% in accordance with schedule requirements outlined in the PEP.
100% in accordance with cost requirements outlined in the PEP.

5.0 NOTES AND GUIDANCE

(Reserved)

6.0 GLOSSARY

6.1 Acronyms

<u>Acronym</u>	<u>Definition</u>
CAD	Computer-Aided Drafting
CAIS	Condition Assessment Information System
CAS	Condition Assessment Survey
COR	Contracting Officer's Representative
DOE	Department of Energy
EADS	Energy Asset Disposal System
EHFFP	Equipment Held For Future Projects
ENS	Emergency Notification System
ES&H	Environmental, Safety, and Health
FIMS	Facility Information Management System
FPMR	Federal Property Management Regulations
GIS	Geographical Information System
NETL	National Energy Technology Laboratory
PADS	Procurement Automated Data System
PEP	Performance Evaluation Plan
PMR	Property Management Regulations
QA	Quality Assurance

QC	Quality Control
R&D	Research and Development
SARS	Safety Analysis Review System
SOD	Site Operations Division
SOW	Statement of Work

6.2 Words or Phrases

<u>Word/Phrase</u>	<u>Definition</u>
Core Work	Predictable, schedulable, and recurring work of a longer duration (typically one year or longer).
Fire-Alarm and Gas-Alarm Network Support	MSA-DAN System and the Johnson Control System
Large-Scale	Engineering design will be typically performed by the R&D site support contractor. However, construction or modification to an on-site R&D facility involving significant addition, deletion, or change to a site or building structure, infrastructure, utilities, or services would be performed under this contract. In all cases, DOE will determine if the project is large-scale or small-scale.
Off-Site	Any location not on one of the NETL sites as defined in “On-Site” below.
On-Site	On Federally-owned or -leased property within the defined boundaries of the sites at Fairbanks, AL; Morgantown, WV; Pittsburgh, PA; and Tulsa, OK; including, in the case of Morgantown, the Research Ridge complex immediately adjacent to the site.
Research Facilities	Research facilities generally begin at an interface defined by the first shut-off valve from the main feeder for gases and liquids or at the panel box or wall outlet for electrical service. Examples where this interface will apply are the systems for nitrogen, instrument air, natural gas,

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cooling water, and electricity for which general support upstream of the first shut-off valve will be performed under Task 4.1.

Small-Scale

Engineering design will typically be performed by the R&D site support contractor, unless DOE chooses to use the site operations site support contractor. Construction or modification to an on-site R&D facility that does not involve significant addition, deletion, or change to a site or building structure, infrastructure, utility, or service will be typically performed by the R&D site support contractor. In all cases, DOE will determine if the project is large-scale or small-scale.